ABSTRACT

An integrated series of security protocols is disclosed that protect remote user communications with remote enterprise services, and simultaneously protect the enterprises services from third parties. In the first layer, an implementation of the Secure Sockets Layer (SSL) version of HTTPS provides communications security, including authentication of the enterprise web server and the security of the transmitted data. The protocols provide for an identification of the user, and an authentication of the user to ensure the user is who he/she claims to be and a determination of entitlements that the user may avail themselves of within the enterprise system. Session security is described, particularly as to the differences between a remote user's copper wire connection to a legacy system and a user's remote connection to the enterprise system over a ``stateless'' public Internet, where each session is a single transmission, rather than an interval of time between logon and logoff, as is customary in legacy systems. Security for the enterprise network and security for the data maintained by the various enterprise applications is also described.